

=====

Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=4; day=16; hr=18; min=40; sec=57; ms=645;]

=====

Reviewer Comments:

<210> 34

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic C-terminal amino acid sequence

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Variable amino acid, hCys, hLys, hArg, Hse, Hyp, or not present

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Variable amino acid; see specification as filed for detailed
description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Ala, Asp, Glu, Asn, Gln, Gly, Val, Arg, Lys, hLys, hArg, His,
Ile, Leu, Met, or not present

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> Ala, Ile, Leu, Ser, Hse, Thr, Val, Met, or not present

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Ala, Ser, Thr, Hse, Tyr, Val, Ile, Leu, or Met

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Thr, Ala, Ser, Hse, Tyr, Val, Ile, Leu, or Met

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Variable amino acid; see specification as filed for detailed description of substitutions and preferred embodiments

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ala, Val, He, Leu, Phe, or Met

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Leu, Thr, Ser, Hse, Val, Ile, or Met

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Gly, His, Gln, Lys, Arg, Asn, hLys, or hArg

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Lys, Arg, Gln, Asn, hLys, hArg, or His

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Leu, Ile, Val, Phe, Met, Trp, or Tyr

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Ala, Phe, Tyr, Asn, Gln, Ser, Hse, or Thr

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Ala, Asp, Glu, Gly, Asn, Lys, Gln, Arg, His, hArg, or hLys

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Ala, Asp, Glu, Phe, Leu, Ser, Tyr, Ile, Val, or Met

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Leu, Phe, Met, Val, Tyr, or Ile

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> His, Gln, Asn, Ser, Hse, Thr, or Val

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> Lys, hLys, Arg, hArg, His, Cit, or Orn

<220>
<221> MISC_FEATURE
<222> (19)..(19)
<223> Phe, Leu, Ser, Hse, Val, Ile, Thr, or not present

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> His, Arg, Lys, hArg, hLys, Asn, Gln, or not present

<220>
<221> MISC_FEATURE

<222> (21)..(21)
<223> Thr, Ser, Hse, Val, Ile, Leu, Gln, Asn, or not present

<220>
<221> MISC_FEATURE
<222> (22)..(22)
<223> Phe, Leu, Met, Val, Tyr, or Ile

<220>
<221> MISC_FEATURE
<222> (23)..(23)
<223> Pro or Hyp

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> Pro, Hyp, Arg, Lys, hArg, hLys, or His

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Thr, Ser, Hse, Val, Ile, Leu, Phe, or Tyr

<220>
<221> MISC_FEATURE
<222> (26)..(26)
<223> Asn, Gln, Asp, or Glu

<220>
<221> MISC_FEATURE
<222> (27)..(27)
<223> Thr, Val, Ser, Phe, Ile, or Leu

<220>
<221> MISC_FEATURE
<222> (28)..(28)
<223> Gly or Ala

<220>
<221> MISC_FEATURE
<222> (29)..(29)
<223> Ser, Hse, Thr, Val, Ile, Leu, or Tyr

<220>
<221> MISC_FEATURE
<222> (30)..(30)
<223> Glu, Gly, Lys, Asn, Asp, Arg, hArg, hLys, His, or Gln

<220>
<221> MISC_FEATURE
<222> (31)..(31)
<223> Ala, Thr, Ser, Hse, Val, lie Leu, Phe, or Tyr

<220>
<221> MISC_FEATURE
<222> (32)..(32)
<223> Phe, Pro, Tyr, Hse, Ser, Thr, or Hyp

<400> 34

Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
20 25 30

The above <220>-<223> explaining location 7 states "variable amino acid": "Tyr" is at location 7, and can only represent itself. Use "Xaa," instead, and explain in <220>-<223> section. The <223> response describing Xaa at location 8 contains an invalid amino acid designator: "He." Please correct.

Application No: 10589054

Version No: 1.0

Input Set:

Output Set:

Started: 2008-04-01 16:37:00.690

Finished: 2008-04-01 16:37:03.342

Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 652 ms

Total Warnings: 135

Total Errors: 0

No. of SeqIDs Defined: 137

Actual SeqID Count: 137

Error code	Error Description
W 402	Undefined organism found in <213> in SEQ ID (2)
W 402	Undefined organism found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)
W 213	Artificial or Unknown found in <213> in SEQ ID (22)

Input Set:

Output Set:

Started: 2008-04-01 16:37:00.690
Finished: 2008-04-01 16:37:03.342
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 652 ms
Total Warnings: 135
Total Errors: 0
No. of SeqIDs Defined: 137
Actual SeqID Count: 137

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (23)
W 213	Artificial or Unknown found in <213> in SEQ ID (24) This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Amylin Pharmaceuticals, Inc.
 Soares, Christopher J.
 Michael, Hanley R.
 Diana, Lewis Y.
 David, Parkes G.
 Carolyn, Jodka M.
 Kathryn, Prickett S.
 Soumitra, Ghosh S.
 Christine, Mack M.
 Qing, Lin

<120> Amylin Family Peptides and Methods for Making and Using Them

<130> 0105US-UTL2

<140> 10589054

<141> 2008-04-01

<150> PCT/US2005/004631

<151> 2005-02-11

<150> US 60/543,275

<151> 2004-02-11

<150> US 60/550,447

<151> 2004-03-04

<160> 137

<170> PatentIn version 3.5

<210> 1

<211> 37

<212> PRT

<213> Homo sapiens

<400> 1

Lys	Cys	Asn	Thr	Ala	Thr	Cys	Ala	Thr	Gln	Arg	Leu	Ala	Asn	Phe	Leu
1			5						10					15	

Val	His	Ser	Ser	Asn	Asn	Phe	Gly	Ala	Ile	Leu	Ser	Ser	Thr	Asn	Val
			20					25					30		

Gly	Ser	Asn	Thr	Tyr
				35

<210> 2

<211> 37

<212> PRT

<213> Rattus sp.

<400> 2

Lys Cys Asn Thr Ala Thr Cys Ala Thr Gln Arg Leu Ala Asn Phe Leu
1 5 10 15

Val Arg Ser Ser Asn Asn Leu Gly Pro Val Leu Pro Pro Thr Asn Val
20 25 30

Gly Ser Asn Thr Tyr
35

<210> 3

<211> 32

<212> PRT

<213> Oncorhynchus sp.

<400> 3

Cys Ser Asn Leu Ser Thr Cys Val Leu Gly Lys Leu Ser Gln Glu Leu
1 5 10 15

His Lys Leu Gln Thr Tyr Pro Arg Thr Asn Thr Gly Ser Gly Thr Pro
20 25 30

<210> 4

<211> 32

<212> PRT

<213> Homo sapiens

<400> 4

Cys Gly Asn Leu Ser Thr Cys Met Leu Gly Thr Tyr Thr Gln Asp Phe
1 5 10 15

Asn Lys Phe His Thr Phe Pro Gln Thr Ala Ile Gly Val Gly Ala Pro
20 25 30

<210> 5

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence motif

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> Any amino acid or not present; see specification as filed for detailed description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (2)..(2)

<223> Any amino acid or not present; see specification as filed for detailed description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (3)..(3)

<223> Any amino acid or not present; see specification as filed for detailed description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (4)..(4)

<223> Any amino acid, see specification as filed for detailed description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (5)..(5)

<223> Any amino acid, see specification as filed for detailed description of substitutions and preferred embodiments

<220>

<221> MISC_FEATURE

<222> (6)..(6)

<223> Any amino acid, see specification as filed for detailed description of substitutions and preferred embodiments

<400> 5

Xaa Xaa Xaa Xaa Xaa Xaa

1 5

<210> 6

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 6

Cys Asn Thr Ala Thr Cys

1 5

<210> 7

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 7

Cys Ala Thr Ala Thr Cys

1 5

<210> 8

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 8

Cys Asp Thr Ala Thr Cys

1 5

<210> 9

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 9

Cys Gly Thr Ala Thr Cys

1 5

<210> 10

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 10

Cys Asn Ala Ala Thr Cys

1 5

<210> 11

<211> 6

<212> PRT

<213> Artificial Sequence

<220>
<223> Synthetic amino acid sequence

<400> 11

Cys Asn Thr Ser Thr Cys
1 5

<210> 12
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic amino acid sequence

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> D-Thr

<400> 12

Cys Asn Thr Ala Xaa Cys
1 5

<210> 13
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic amino acid sequence

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Thr(OPO3H2)

<400> 13

Cys Asn Thr Ala Xaa Cys
1 5

<210> 14
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic amino acid sequence

<400> 14

Cys Asn Thr Ala Ser Cys

1 5

<210> 15

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 15

Cys Asn Thr Ala Ala Cys

1 5

<210> 16

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 16

Cys Asn Thr Ala Val Cys

1 5

<210> 17

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<220>

<221> MISC_FEATURE

<222> (5)..(5)

<223> Hse

<400> 17

Cys Asn Thr Ala Xaa Cys

1 5

<210> 18

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<220>

<221> MISC_FEATURE

<222> (5)..(5)

<223> Ahb

<400> 18

Cys Asn Thr Ala Xaa Cys
1 5

<210> 19

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<220>

<221> MISC_FEATURE

<222> (5)..(5)

<223> Ahp

<400> 19

Cys Asn Thr Ala Xaa Cys
1 5

<210> 20

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 20

Cys Ser Asn Leu Ser Thr Cys
1 5

<210> 21

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 21

Cys Gly Asn Leu Ser Thr Cys

1 5

<210> 22

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 22

Cys Ala Asn Leu Ser Thr Cys

1 5

<210> 23

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 23

Cys Ser Ala Leu Ser Thr Cys

1 5

<210> 24

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 24

Cys Ser Asn Ala Ser Thr Cys

1 5

<210> 25

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 25

Cys Ser Asn Leu Ala Thr Cys
1 5

<210> 26

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 26

Cys Ser Asn Leu Ser Ala Cys
1 5

<210> 27

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 27

Lys Cys Asn Thr Ala Thr Cys
1 5

<210> 28

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<400> 28

Leu Leu Gln Gln Leu Gln Lys Leu Leu Gln Lys Leu Lys Gln Tyr
1 5 10 15

<210> 29

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic amino acid sequence

<220>
 <221> MISC_FEATURE
 <222> (1)..(4)
 <223> This region may encompass 1-4 variable amino acids

 <220>
 <221> MISC_FEATURE
 <222> (7)..(7)
 <223> Gly or Aib

 <220>
 <221> MISC_FEATURE
 <222> (8)..(8)
 <223> Lys, Arg, Orn, hArg, Cit, hLys, or Lys(for)

 <220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> Glu or Phe

 <220>
 <221> MISC_FEATURE
 <222> (14)..(14)
 <223> His or Aib

 <220>
 <221> MISC_FEATURE
 <222> (15)..(15)
 <223> Lys, Arg, Orn, hArg, Cit, hLys, Lys(for), or Lys(PEG5000)

 <220>
 <221> MISC_FEATURE
 <222> (19)..(19)
 <223> Tyr or Leu

 <220>
 <221> MISC_FEATURE
 <222> (21)..(21)
 <223> Arg or Pro

 <220>
 <221> MISC_FEATURE
 <222> (25)..(28)
 <223> This region may encompass 1-4 variable amino acids or is absent

<400> 29

Xaa Xaa Xaa Xaa Val Leu Xaa Xaa Leu Ser Gln Xaa Leu Xaa Xaa Leu
 1 5 10 15

Gln Thr Xaa Pro Xaa Thr Asn Thr Xaa Xaa Xaa Xaa
 20 25

<210> 30

<211> 28
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic amino acid sequence

<220>
<221> MISC_FEATURE
<222> (1)..(4)
<223> This region may encompass 1-4 variable amino acid residues or is absent

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Ala or Val

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Thr, Met, or Leu

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Gln, Gly, or His

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Leu or Thr

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Ala, Thr, Asn, Phe, Tyr, Ser, or Thr

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Asn, Arg, Ala, Asp, Glu, Gln, Thr, or Gly

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Phe, Leu, Ser, Glu, Ala, Asp, or Tyr

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Leu or Asp

<220>
<221> MISC_FEATURE
<222> (14)..(14)

<223> Val, His, Ser, Phe, or Aib

<220>

<221> MISC_FEATURE

<222> (15)..(15)

<223> His, Arg, Lys, Orn, hArg, Cit, hLys, Lys(for), or Lys(PEG500 0)

<220>

<221> MISC_FEATURE

<222> (16)..(16)

<223> Leu, Ser, or Phe

<220>

<221> MISC_FEATURE

<222> (17)..(17)

<223> Gln or His

<220>

<221> MISC_FEATURE

<222> (18)..(18)

<223> Thr or Asn

<220>

<221> MISC_FEATURE

<222> (19)..(19)

<223> Tyr, Val, Phe, Leu, or Met

<220>

<221> MISC_FEATURE

<222> (21)..(21)

<223> Arg or Pro

<220>

<221> MISC_FEATURE

<222> (25)..(28)

<223> This region may encompass 1-4 variable amino acid residues or is absent

<400> 30

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Xaa Xaa Xaa Xaa Xaa Xaa
1 5 10 15

Xaa Xaa Xaa Pro Xaa Thr Asn Thr Xaa Xaa Xaa
20 25

<210> 31

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Synthetic C-terminal amino acid sequence

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Lys, Tyr, or not present

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Ser, Pro, or not present

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ser, Pro, Arg, or not present

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Thr or not present

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Asn or not present

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Val, Thr, or not present

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ser or Glu

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Asn, Lys, or Gly

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Thr, Phe, or Ala

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Tyr, Phe, Pro, or not present

<400> 31

Xaa Xaa Xaa Xaa Xaa Xaa Gly Xaa Xaa Xaa Xaa
1 5 10

<210> 32

<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic C-terminal amino acid sequence

<400> 32

Lys Ser Asn Phe Val Pro Thr Asn
1 5

<210> 33
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic C-terminal amino acid sequence

<400> 33

Ser Asn Phe Val Pro Thr Asn Val
1 5

<210> 34
<211> 32
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic C-terminal amino acid sequence

<220>
<221> MISC_FEATURE
<222> (1)..(1)
<223> Variable amino acid, hCys, hLys, hArg, Hse, Hyp, or not present

<220>
<221> MISC_FEATURE
<222> (2)..(2)
<223> Variable amino acid; see specification as filed for detailed description of substitutions and preferred embodiments

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ala, Asp, Glu, Asn, Gln, Gly, Val, Arg, Lys, hLys, hArg, His, Ile, Leu, Met, or not present

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Ala, Ile, Leu, Ser, Hse, Thr, Val, Met, or not present

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Ala, Ser, Thr, Hse, Tyr, Val, Ile, Leu, or Met

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Thr, Ala, Ser, Hse, Tyr, Val, Ile, Leu, or Met

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Variable amino acid; see specification as filed for detailed description of substitutions and preferred embodiments

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ala, Val, He, Leu, Phe, or Met

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Leu, Thr, Ser, Hse, Val, Ile, or Met

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Gly, His, Gln, Lys, Arg, Asn, hLys, or hArg

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Lys, Arg, Gln, Asn, hLys, hArg, or His

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Leu, Ile, Val, Phe, Met, Trp, or Tyr

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Ala, Phe, Tyr, Asn, Gln, Ser, Hse, or Thr

<220>
<221> MISC_FEATURE
<222> (14)..(14)
<223> Ala, Asp, Glu, Gly, Asn, Lys, Gln, Arg, His, hArg, or hLys

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Ala, Asp, Glu, Phe, Leu, Ser, Tyr, Ile, Val, or Met

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Leu, Phe, Met, Val, Tyr, or Ile

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> His, Gln, Asn, Ser, Hse, Thr, or Val

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> Lys, hLys, Arg, hArg, His, Cit, or Orn

<220>
<221> MISC_FEATURE
<222> (19)..(19)
<223> Phe, Leu, Ser, Hse, Val, Ile, Thr, or not present

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> His, Arg, Lys, hArg, hLys, Asn, Gln, or not present

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Thr, Ser, Hse, Val, Ile, Leu, Gln, Asn, or not present

<220>
<221> MISC_FEATURE
<222> (22)..(22)
<223> Phe, Leu, Met, Val, Tyr, or Ile

<220>
<221> MISC_FEATURE
<222> (23)..(23)
<223> Pro or Hyp

<220>
<221> MISC_FEATURE
<222> (24)..(24)
<223> Pro, Hyp, Arg, Lys, hArg, hLys, or His

<220>
<221> MISC_FEATURE
<222> (25)..(25)
<223> Thr, Ser, Hse, Val, Ile, Leu, Phe, or Tyr

<220>
<221> MISC_FEATURE
<222> (26)..(26)
<223> Asn, Gln, Asp, or Glu

<220>
<221> MISC_FEATURE

<222> (27)..(27)
 <223> Thr, Val, Ser, Phe, Ile, or Leu

 <220>
 <221> MISC_FEATURE
 <222> (28)..(28)
 <223> Gly or Ala

 <220>
 <221> MISC_FEATURE
 <222> (29)..(29)
 <223> Ser, Hse, Thr, Val, Ile, Leu, or Tyr

 <220>
 <221> MISC_FEATURE
 <222> (30)..(30)
 <223> Glu, Gly, Lys, Asn, Asp, Arg, hArg, hLys, His, or Gln

 <220>
 <221> MISC_FEATURE
 <222> (31)..(31)
 <223> Ala, Thr, Ser, Hse, Val, lie Leu, Phe, or Tyr

 <220>
 <221> MISC_FEATURE
 <222> (32)..(32)
 <223> Phe, Pro, Tyr, Hse, Ser, Thr, or Hyp

 <400> 34

 Xaa Xaa Xaa Xaa Xaa Xaa Tyr Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30

 <210> 35
 <211> 32
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Synthetic C-terminal amino acid sequence

 <220>
 <221> MISC_FEATURE
 <222> (1)..(1)
 <223> Ala, Cys, Asp, Phe, Ile, Lys, Ser, Thr, or not present

 <220>
 <221> MISC_FEATURE
 <222> (2)..(2)
 <223> Cys, Asp, Ser, or not present

<220>
<221> MISC_FEATURE
<222> (3)..(3)
<223> Ala, Asp, Asn, or not present

<220>
<221> MISC_FEATURE
<222> (4)..(4)
<223> Ala, Leu Thr, or not present

<220>
<221> MISC_FEATURE
<222> (5)..(5)
<223> Ala or Ser

<220>
<221> MISC_FEATURE
<222> (6)..(6)
<223> Thr, Ala, Ser, or Val

<220>
<221> MISC_FEATURE
<222> (7)..(7)
<223> Cys, Lys, or Ala

<220>
<221> MISC_FEATURE
<222> (8)..(8)
<223> Ala, Val, Leu, or Met

<220>
<221> MISC_FEATURE
<222> (9)..(9)
<223> Leu or Thr

<220>
<221> MISC_FEATURE
<222> (10)..(10)
<223> Gly, His, or Gln

<220>
<221> MISC_FEATURE
<222> (11)..(11)
<223> Lys, Arg, Gln, or hArg

<220>
<221> MISC_FEATURE
<222> (12)..(12)
<223> Leu, Trp, or Tyr

<220>
<221> MISC_FEATURE
<222> (13)..(13)
<223> Ala, Phe, Asn, Gln, Ser, or Thr

<220>
<221> MISC_FEATURE

<222> (14)..(14)
<223> Ala, Asp, Glu, Gly, Asn, Lys, Gln, or Arg

<220>
<221> MISC_FEATURE
<222> (15)..(15)
<223> Ala, Asp, Glu, Phe, Leu, Ser, or Tyr

<220>
<221> MISC_FEATURE
<222> (16)..(16)
<223> Leu or Phe

<220>
<221> MISC_FEATURE
<222> (17)..(17)
<223> His, Gln, Ser, or Val

<220>
<221> MISC_FEATURE
<222> (18)..(18)
<223> Lys, Arg, hArg, Cit, or Orn

<220>
<221> MISC_FEATURE
<222> (19)..(19)
<223> Phe, Leu, Ser, or not present

<220>
<221> MISC_FEATURE
<222> (20)..(20)
<223> His, Gln, or not present

<220>
<221> MISC_FEATURE
<222> (21)..(21)
<223> Thr, Asn, or not present

<220>
<221> MISC_FEATURE
<222> (22)..(22)
<223> Phe, Leu, Met, Val, or Tyr

<220>
<221> MISC_FEATURE
<222> (24